

**Commonwealth of Kentucky**  
**Division for Air Quality**  
***PERMIT STATEMENT OF BASIS***

CONDITIONAL MAJOR FINAL PERMIT NO. F-06-004

OWENSBORO PAVING COMPANY

OWENSBORO, KENTUCKY 42302-2000

JANUARY 17, 2007

ROBERT L. WILLIAMS, REVIEWER

PLANT I.D. # 21-059-00149

AI # 38980

**SOURCE DESCRIPTION:**

Owensboro Paving Company is currently operating a batch hot-mix asphalt plant and a drum hot-mix asphalt plant at their Highway 60 East facility in Owensboro, Kentucky. They submitted an application on September 21, 2001 for a modification to their existing conditional major permit, F-99-001, to include the drying of magnetite in either of their asphalt plants. On August 13, 2003 Owensboro Paving Company submitted an application for the renewal of their existing conditional major permit, F-99-001. Included with the renewal application was a request for the new permit to allow the burning of #4 fuel oil in addition to natural gas at both plants. On November 30, 2005, the Division for Air Quality received another application regarding the permitting of coal at the drum mix plant. On July 10, 2006, the Division received emission factor information regarding the burning of coal in the drum mix plant.

The existing batch-mix plant is regulated under State Regulation 401 KAR 61:020, Existing Process Operations, and is limited to a production rate of 225,000 tons for any twelve-month consecutive period. The existing drum-mix plant is regulated under State Regulation 401 KAR 59:465, Standards of Performance for Hot-Mix Asphalt Plants, and is limited to a production rate of 500,000 tons for any twelve-month consecutive period.

Since Owensboro Paving Company has requested a modification to the type of fuel used at both plants, both plants will now be subject to State Regulation 401 KAR 60:005, Standards of performance for new stationary sources, which incorporates by reference 40 CFR 60.90 (40 CFR 60, Subpart I, Standards of Performance for Hot Mix Asphalt Facilities). The new permit will be issued pursuant to State Regulation 401 KAR 52:030, Federally-enforceable permits for non-major sources and will be a construction / operating Conditional Major permit. The limits set forth in the permit will restrict asphalt production of the batch plant to 175,000 tons/year, and the drum plant will be restricted to 340,000 tons/year.

The source is currently operating under:

**Permit F-99-001**, signed February 26, 1999, which covers both their batch and drum hot mix asphalt plants and the haul road and yard area.

## COMMENTS:

### TYPE OF CONTROL AND EFFICIENCY

The particulate emissions from the rotary dryers are controlled by baghouses (control efficiency of 99.9%).

The particulate emissions from the loadouts, stockpiles, receiving hopper, and storage silo associated with the magnetite operation, and the aggregate handling and stockpile associated with the asphalt plants are controlled by a wet suppression method (control efficiency of 90%).

The emissions from haul roads (paved and unpaved) are controlled by a wet suppression method. The paved haul roads have a control efficiency of 90%, while the unpaved haul roads have a control efficiency of 70%.

The CO, NO<sub>x</sub>, and SO<sub>2</sub> have no controls assigned to them.

### EMISSION FACTORS AND THEIR SOURCE

AP-42, Chapter 11.1, Hot Mix Asphalt Plants, was used for the asphalt processing.

Emission factors for the burning of coal blended with an auxiliary fuel were provided by Gencor Industries Inc of Orlando, Florida.

Emission Factors for the magnetite operation are the standard factors used for the limestone industry in the Commonwealth of Kentucky by the Division for Air Quality's Minerals Section.

### APPLICABLE REGULATIONS

The Rotary Dryers associated with the asphalt plants are governed by **401 KAR 60:005**, Standards of performance for new stationary sources, which incorporates by reference 40 CFR 60.90 (40 CFR 60, Subpart I) and **401 KAR 44:010**, Standards for the management of used oil, which incorporates by reference 40 CFR 279, Subpart B).

The aggregate handling, stockpiles, and haul roads and yard areas associated with the asphalt plants, along with the loadouts, stockpile, receiving hopper, and storage silo associated with the magnetite operation are governed by **401 KAR 63:010**, Fugitive emissions.

## PROPOSALS:

Owensboro Paving Company applied for a permit that would cover both operations of their drum hot mix asphalt plant and their batch hot mix asphalt plant under one permit on November 16, 1998. A permit (Permit No. F-99-001, ID # 077-0920-0149) was issued on February 26, 1999, and is the current operating permit from the facility. An application for the renewal of this permit was received on August 14 2003, by the Division.

**EMISSION AND OPERATING CAPS DESCRIPTION:**

Owensboro Paving Company has requested voluntary permit emission limits of 95 tons per year (tpy) or less of carbon monoxide (CO) by limiting the annual production of asphalt from each plant. Compliance with this limitation will also limit the nitrogen oxides (NO<sub>x</sub>), sulfur dioxide (SO<sub>2</sub>), and volatile organic compounds (VOCs) from the source to 95 tons or less per year; and single and total hazardous air pollutants (HAPs) to less than 10 and 25 tons per year, respectively. Owensboro Paving Company will also limit fugitive particulate emissions by utilizing wet suppression, moisture carryover, and/or enclosures. Compliance with the permit limits will make the requirements of State Regulation 401 KAR 52:020, Title V permits not applicable to this source.

**CREDIBLE EVIDENCE:**

This permit contains provisions which require that specific test methods, monitoring or recordkeeping be used as a demonstration of compliance with permit limits. On February 24, 1997, the U.S. EPA promulgated revisions to the following federal regulations: 40 CFR Part 51, Sec. 51.212; 40 CFR Part 52, Sec. 52.12; 40 CFR Part 52, Sec. 52.30; 40 CFR Part 60, Sec. 60.11 and 40 CFR Part 61, Sec. 61.12, that allow the use of credible evidence to establish compliance with applicable requirements. At the issuance of this permit, Kentucky has only adopted the provisions of 40 CFR Part 60, Sec. 60.11 and 40 CFR Part 61, Sec. 61.12 into its air quality regulations.